

STENT DELIVERY APPARATUS AND METHOD**Abstract of the Invention**

The invention is a method and apparatus for inserting a self expanding stent into a delivery device and subsequently delivering the stent into a body lumen. The

5 apparatus comprises an outer tube; an inner tube within the outer tube; a capturing

element slidably mounted on the inner tube and including a foldable sleeve with a proximal end smaller than the outer tube and a distal end larger than the outer tube, a

blocking element fixed to the inner tube adapted to block a stent from being inserted

into the sleeve proximally of the blocking element and to block the capturing element

10 from becoming situated distally of a predetermined point relative to said inner tube, the

capturing element carried on the inner tube so that the distal end of the sleeve can

extend beyond the distal end of the outer tube in an unfolded condition and so that the

sleeve can be drawn into the outer tube by the blocking element and become folded

within the outer tube when the inner tube is drawn proximally relative to the outer tube,

15 whereby a stent having an end inserted into the sleeve is drawn into the outer tube,

thereby becoming captured in a radially constricted condition within the outer tube.

The stent is deployed by inserting the delivery apparatus into a body lumen to position

the distal end of the tube adjacent the stent deployment site and drawing the outer tube

proximally relative to the stent, which is blocked from being drawn along with the outer

20 tube by the blocking element on the inner tube so as to release the stent from its

radially constricted condition.